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  * * * * * * * * * * * * * * STN  Columbus  * *
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FILE 'HOME' ENTERED AT 13:00:18 ON 28 AUG 2001

=> index bioscience
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS
SINCE FILE      TOTAL

ENTRY    SESSION
FULL ESTIMATED COST
0.15       0.15

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA,
ANABSTR, AQUASCI, BIOBUSINESS,
       BIOCOMMERCE, BIOSIS, BIOTECHABS,
BIOTECHDS, BIOTECHNO, CABA, CANCERLIT,
       CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI,
CROPB, CROPU, DDFB, DDFU, DGENE,
       DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL,
...' ENTERED AT 13:00:26 ON 28 AUG 2001

59 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term
postings or to view
search error messages that display as 0* with
SET DETAIL OFF.

=> s (ph dependence) (5a) (ion exchange#)
          1   FILE ANABSTR
          4   FILE BIOSIS
          1   FILE CABA
          1   FILE CANCERLIT
         19   FILE CAPLUS
  14 FILES SEARCHED...
          2   FILE CEABA-VTB
  29 FILES SEARCHED...
          1   FILE FROSTI
          1   FILE JICST-EPLUS
          1   FILE MEDLINE
          1   FILE NTIS
          2   FILE PASCAL
  48 FILES SEARCHED...
          4   FILE SCISEARCH
          1   FILE TOXLIT

  13 FILES HAVE ONE OR MORE ANSWERS,    59
FILES SEARCHED IN STNINDEX

L1   QUE (PH DEPENDENCE) (5A) (ION EXCHANGE#)

=> d rank
F1          19   CAPLUS
F2           4   BIOSIS
F3           4   SCISEARCH
F4           2   CEABA-VTB
F5           2   PASCAL
F6           1   ANABSTR
F7           1   CABA
F8           1   CANCERLIT
F9           1   FROSTI
F10          1   JICST-EPLUS
F11          1   MEDLINE
F12          1   NTIS
F13          1   TOXLIT

=> file hits
COST IN U.S. DOLLARS
SINCE FILE      TOTAL

ENTRY    SESSION
FULL ESTIMATED COST
3.15       3.30

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Technology Corporation (JST)

FILE 'MEDLINE' ENTERED AT 13:04:31 ON 28 AUG
2001

FILE 'NTIS' ENTERED AT 13:04:31 ON 28 AUG 2001
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FILE 'TOXLIT' ENTERED AT 13:04:31 ON 28 AUG 2001

=> s l1
11 FILES SEARCHED...
L2 39 L1

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3 29 DUP REM L2 (10 DUPLICATES REMOVED)
ANSWERS '1-19' FROM FILE CAPLUS
ANSWERS '20-23' FROM FILE BIOSIS
ANSWERS '24-25' FROM FILE CEABA-VTB
ANSWER '26' FROM FILE ANABSTR
ANSWER '27' FROM FILE FROSTI
ANSWER '28' FROM FILE JICST-EPLUS
ANSWER '29' FROM FILE NTIS

=> d scan

L3 29 ANSWERS CEABA COPYRIGHT 2001 DECHEMA
TI Elimination of metal cations from aqueous solutions by coordinative bonding on polyacids and ultrafiltration
Metallioneneliminierung aus Waessern durch koordinative Bindung an Polysaeuren und Ultrafiltration
CT METAL; ULTRAFILTRATION; ION EXCHANGE; METAL EXTRACTION; POLYMER SEPARATION; WASTEWATER TREATMENT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):28

L3 29 ANSWERS FROSTI COPYRIGHT 2001 LFRA
TI Physical restraining property of gelatins - ***pH*** ***dependence*** of gelatins treated with ***ion*** ***exchange*** resins.
CT DETERMINATION; FACTORS AFFECTING; GELATIN; ION EXCHANGE RESINS; PH; PHOTOGRAPHIC GELATIN; PHYSICAL; REDUCTION; RESINS; SYSTEMS

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 53-1 (Mineralogical and Geological Chemistry)
TI The albite-water system: Part III. Characterization of leached and hydrogen-enriched layers formed at 300.degree. C using MeV ion beam techniques
ST albite water interface nearsurface chem leaching; hydrothermal alteration albite nearsurface chem characterization
IT Hydrothermal alteration
Leaching
(characterization by MeV ion beam techniques of leached and hydrogen-enriched layers formed at 300.degree. in albite near its interface with water)
IT Feldspar group minerals
RL: GPR (Geological or astronomical process); RCT (Reactant); PROC (Process)
(characterization by MeV ion beam techniques of leached and hydrogen-enriched layers formed at 300.degree. in albite near its interface with water)
IT 7732-18-5, Water, processes 12244-10-9, Albite
RL: GPR (Geological or astronomical process); RCT (Reactant); PROC (Process)
(characterization by MeV ion beam techniques of leached and hydrogen-enriched layers formed at 300.degree. in albite near its interface with water)
IT 17341-25-2, Sodium, ion (Na1+), processes
RL: GPR (Geological or astronomical process); PEP (Physical, engineering or chemical process); PROC (Process)
(loss from near-surface part of albite leached by water at 300.degree.)
IT 12385-13-6, processes
RL: GPR (Geological or astronomical process); PEP (Physical, engineering or chemical process); PROC (Process)
(permeation into near-surface part of albite interacting with water at 300.degree.)
IT 7429-90-5, Aluminum, processes
RL: GPR (Geological or astronomical process); PEP (Physical, engineering or chemical process); PROC (Process)
(preferential leaching from near-surface part of albite interacting with water at 300.degree.)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 66-4 (Surface Chemistry and Colloids)
Section cross-reference(s): 63, 75, 78
TI Preparation and phosphate ion-exchange properties of a hydrotalcite-like compound
ST phosphate ion exchanger prepn hydrotalcite compd; chloride intercalation hydrotalcite phosphate anion exchanger; hyperphosphatemia hemodialysis oral phosphate binder hydrotalcite
IT Anion exchangers
(hydrotalcite-like compd. prepd. by chloride intercalation as, for phosphate)
IT Crystal structure
(of hydrotalcite-like compd., prepd. by chloride intercalation)
IT Kidney, disease
(chronic, hyperphosphatemia in humans on hemodialysis in, hydrotalcite-like ion exchanger for prevention of)
IT Dialysis
(hemo-, hyperphosphatemia in humans in, hydrotalcite-like ion exchanger for prevention of)
IT 14265-44-2, Phosphate, properties
RL: PRP (Properties)
(anion exchange of, on chloride-intercalated hydrotalcite-like compd.)
IT 149320-54-7

RL: PRP (Properties)
(anion exchanger, for phosphate, prepn. and properties of)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 61-2 (Water)
TI Metal ion removal from aquatic systems by coordinative covalency to
polyacids and ultrafiltration
ST metal removal complexation ultrafiltration water
IT Metals, uses and miscellaneous
RL: REM (Removal or disposal); PROC (Process)
(removal of, from water, by complexation and ultrafiltration)
IT Water purification
(complexation, metal removal by, ultrafiltration in relation to)
IT Water purification
(ultrafiltration, metal removal by, complexation in relation to)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 80-1 (Organic Analytical Chemistry)
Section cross-reference(s): 79
TI Potential response of liquid ion-exchange membrane electrodes with a
weak-acid anion as primary ion, and its dependence on pH
ST weak acid selective electrode pH dependence; hydrogen sulfate interference
acid detn; math model pH dependence membrane electrode; ***ion*** ***exchange*** membrane electrode ***pH*** ***dependence*** ; liq
membrane electrode pH dependence
IT Acids, analysis
RL: ANT (Analyte); ANST (Analytical study)
(dibasic, potentiometric detn. of, potential response of liq.
ion-exchange membrane electrodes based on weak-acid anion for, as
function of pH)
IT Electrodes
(ion-selective, based on liq. ion-exchanger membrane contg. weak-acid
anion, response of)
IT 65-85-0, Benzoic acid, analysis 88-99-3, Phthalic acid, analysis
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, by potentiometry, potential response of liq. ion-exchange
membrane electrode in relation to pH for)
IT 7664-93-9, Sulfuric acid, uses and miscellaneous
RL: ANST (Analytical study); USES (Uses)
(interference by, in weak acid detn. by potentiometry with liq.
ion-exchange membrane electrodes based on weak-acid anions)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 53-1 (Mineralogical and Geological Chemistry)
Section cross-reference(s): 67, 69
TI Thermodynamic and kinetic constraints on reaction rates among minerals and
aqueous solutions. III. Activated complexes and the pH-dependence of the
rates of feldspar, pyroxene, wollastonite, and olivine hydrolysis
ST kinetics hydrolysis mineral surface exchange; feldspar kinetics hydrolysis
surface exchange; pyroxene kinetics hydrolysis surface exchange; olivine
kinetics hydrolysis surface exchange; wollastonite kinetics hydrolysis
surface exchange
IT Feldspar-group minerals
Minerals
Olivine-group minerals
Pyroxene-group minerals
RL: RCT (Reactant)
(hydrolysis of, kinetics of, cation exchange and adsorption in relation
to)
IT Kinetics of hydrolysis
(of minerals, cation exchange and adsorption in relation to)
IT Adsorption
Cation exchange
(on mineral surfaces, kinetics of hydrolysis in relation to)
IT 13983-17-0, Wollastonite
RL: RCT (Reactant)
(hydrolysis of, kinetics of, cation exchange and adsorption in relation
to)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 79-2 (Inorganic Analytical Chemistry)
Section cross-reference(s): 72
TI The preparation of a selective uranium(VI) electrode of the liquid ion
exchange type
ST uranium detn ion selective electrode; polytetrafluoroethylene graphite
membrane electrode; benzoate uranyl ion exchange electrode
IT Electric potential
(of liq. ***ion*** - ***exchange*** -type uranium-selective
electrode, ***pH*** ***dependence*** of)
IT Ores and Ore deposits
RL: AMX (Analytical matrix); ANST (Analytical study)
(uranium detn. in, ion-selective electrode for)
IT Electrodes
(uranium-selective, membrane, liq. ion-exchange-type)
IT 7440-61-1, analysis
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in ores, ion-selective electrode for)
IT 47638-54-0
RL: ANST (Analytical study)
(ion-exchange-type uranium-selective electrode contg. org. soln. of)
IT 9002-84-0
RL: ANST (Analytical study)
(membrane from graphite and, in liq. ion-exchange-type
uranium-selective electrode)
IT 7782-42-5, uses and miscellaneous
RL: USES (Uses)

(membrane from poly(tetrafluoroethylene) and, in liq. ion-exchange-type uranium-selective electrode)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 66-4 (Surface Chemistry and Colloids)
TI Ion-exchange separation of cesium(1+)-rubidium(1+) and potassium(1+)-sodium(1+) systems on a fixed bed of KU-1 ***ion*** ***exchanger*** based on ***pH*** ***dependence*** of its selectivity and sorption power
ST alkali metal sepn chromatog KU 1; sorption sepn alkali metal; cesium rubidium sepn chromatog exchanger; potassium sodium sepn chromatog exchanger
IT Cation exchange
(alkali metal ion sepn. by pH-controlled, on KU 1)
IT Cation exchangers
(sepn. of alkali metal binary mixt. by pH-controlled sorption on)
IT Alkali metals, properties
RL: PRP (Properties)
(sepn. of binary mixt. of, by pH-controlled sorption on cation exchangers)
IT 11098-46-7
RL: PRP (Properties)
(sepn. of alkali metal binary mixt. by pH-controlled sorption on)
IT 22537-38-8, properties
RL: PRP (Properties)
(sepn. of cesium ion from, by pH-controlled sorption)
IT 17341-25-2, properties
RL: PRP (Properties)
(sepn. of potassium ion from, by pH-controlled sorption)
IT 18459-37-5, properties
RL: PRP (Properties)
(sepn. of rubidium ion from, by pH-controlled sorption)
IT 24203-36-9, properties
RL: PRP (Properties)
(sepn. of sodium ion from, by pH-controlled sorption)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 66 (Surface Chemistry and Colloids)
TI Adsorption and coprecipitation of silver on hydrous oxides of iron and manganese
ST adsorption copptn silver; iron oxides adsorption copptn silver; manganese oxides adsorption copptn silver; hydrous oxides adsorption copptn silver
IT Adsorption
(of silver, by transition metal hydroxides)
IT Iron hydroxide
Manganese hydroxide
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(adsorption by, of silver)
IT 7440-22-4, properties
RL: PRP (Properties)
(adsorption and pptn. of, by transition metal hydroxides)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 77 (Electrochemistry)
TI Potential-pH relations of gamma manganese dioxide
ST MANGANESE DIOXIDE POTENTIALS; POTENTIALS MN DIOXIDE; ELECTRODE POTENTIALS MN DIOXIDE; ION EXCHANGE MN DIOXIDE
IT Electric potential
Ion exchange
(of manganese oxide (MnO2), pH effect on)
IT 1313-13-9, properties
RL: PRP (Properties)
(elec. potential and ion exchange of, pH effect on)

L3 29 ANSWERS BIOSIS COPYRIGHT 2001 BIOSIS
TI DNA POLYMERASES OF MURINE LBN-B LEUKEMIC CELLS.
IT Miscellaneous Descriptors
VIRAL ORIGIN CARCINOGENESIS RNA DIRECTED DNA POLYMERASE DNA DIRECTED DNA POLYMERASE ALPHA DNA DIRECTED DNA POLYMERASE BETA DNA DIRECTED DNA POLYMERASE GAMMA N ETHYL MALEIMIDE METAB-DRUG POLY ADENYLATEOLIGO DEOXY THYMIDYLATE TEMPLATE ACTIVITY REVERSE TRANSCRIPTASE

L3 29 ANSWERS BIOSIS COPYRIGHT 2001 BIOSIS
TI TITRATIONS OF ORGANIC SOILS WITH STANDARD BASE SOLUBILITY OF IONIZABLE FUNCTIONAL GROUPS AT 25 C.
IT Miscellaneous Descriptors
CARBOXYL ***ION*** ***EXCHANGE*** ***PH*** ***DEPENDENCE*** AUTOMATIC TITRATOR MICROCOMPUTER

L3 29 ANSWERS CEABA COPYRIGHT 2001 DECHEMA
TI ***pH*** ***dependence*** of ***ion*** - ***exchange*** equilibrium of proteins
pH-Abhaengigkeit des Gleichgewichts des Ionenaustauschprozesses von Proteinen
CT EQUILIBRIUM; MODEL; PH; PROTEIN; ADSORPTION; EQUILIBRIUM MODEL; ION EXCHANGE; REACTION MODEL

L3 29 ANSWERS JICST-EPlus COPYRIGHT 2001 JST
TI Phosphate Ion-Exchange Characteristics of The Pyroaurite-like Compound.

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 9-3 (Biochemical Methods)
Section cross-reference(s): 6
TI ***pH*** ***dependence*** of ***ion*** - ***exchange*** equilibrium of proteins
ST protein ion exchange chromatog pH ionic strength model
IT Proteins (general), properties
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)

(bovine serum albumin as model of; ***pH*** ***dependence*** of ***ion*** - ***exchange*** equil. of proteins)
IT Serum albumin
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(model protein; ***pH*** ***dependence*** of ***ion*** - ***exchange*** equil. of proteins)
IT ***Ion*** ***exchange*** ***Ion*** ***exchange*** chromatography
Ionic strength
Physicochemical simulation
Protein adsorption
Protonation
pH
(***pH*** ***dependence*** of ***ion*** - ***exchange*** equil. of proteins)
IT Electric charge
(protein; ***pH*** ***dependence*** of ***ion*** - ***exchange*** equil. of proteins)
IT 116874-53-4, Sepharose Q
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(strong anion exchanger; ***pH*** ***dependence*** of ***ion*** - ***exchange*** equil. of proteins)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 66-5 (Surface Chemistry and Colloids)
TI Selective Binding of Divalent Cations at the Surface of Self-Assembled Monolayers of an Aromatic Bifunctional Molecule Studied on a Quartz Crystal Microbalance
ST cation exchange cadmium lead carboxythiophenol monolayer
IT Cation exchange
(selective binding of divalent cations at surface of self-assembled monolayers of arom. bifunctional mol.)
IT 14280-50-3, Lead 2+, processes 22537-48-0, Cadmium 2+, processes
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process)
(selective binding of divalent cations at surface of self-assembled monolayers of arom. bifunctional mol.)
IT 1074-36-8, 4-Carboxythiophenol
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process)
(selective binding of divalent cations at surface of self-assembled monolayers of arom. bifunctional mol. of)
IT 7440-57-5, Gold, processes
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process)
(selective binding of divalent cations at surface of self-assembled monolayers of arom. bifunctional mol. on)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 2-5 (Mammalian Hormones)
TI Intracellular- ***pH*** ***dependence*** of sodium-hydrogen ***ion*** ***exchange*** and acid loading in quiescent and arginine vasopressin-activated mesangial cells
ST vasopressin kidney mesangium pH; sodium hydrogen exchange mesangial AVP
IT Biological transport
(antiport, of hydrogen ion with sodium, in kidney mesangial cell, arginine vasopressin effect on intracellular pH in relation to)
IT Kidney
(mesangium, arginine vasopressin effect on intracellular pH in, acid loading and hydrogen-sodium exchange in relation to)
IT 7440-23-5, Sodium, biological studies
RL: BIOL (Biological study)
(hydrogen ion exchange with, arginine vasopressin effect on mesangial cell intracellular pH in relation to)
IT 113-79-1, Arginine vasopressin
RL: BIOL (Biological study)
(kidney mesangial cell intracellular pH response to, acid loading and hydrogen-sodium exchange in relation to)
IT 12408-02-5, Hydrogen ion, biological studies
RL: BIOL (Biological study)
(sodium exchange with, arginine vasopressin effect on mesangial cell pH in relation to)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 49-10 (Industrial Inorganic Chemicals)
TI The use of low-rank brown coal as an ion-exchange material. 1. Basic parameters and the ion-exchange mechanism
ST brown coal cation exchange capacity
IT Cation exchangers
(brown coal, of Victoria, Australia)
IT Chlorides, properties
Sulfates, properties
RL: PRP (Properties)
(exchange of, in brown coal)
IT Coal, brown
RL: PRP (Properties)
(ion exchange capacity of, of Victoria, Australia)
IT 7440-23-5, Sodium, properties
RL: PRP (Properties)
(exchange of, in brown coal)
IT 7429-90-5, Aluminum, properties 7439-92-1, Lead, properties 7439-96-5, Manganese, properties 7439-97-6, Mercury, properties 7440-02-0, Nickel, properties 7440-43-9, Cadmium, properties 7440-48-4, Cobalt, properties 7440-50-8, Copper, properties 7440-66-6, Zinc, properties
RL: PRP (Properties)
(exchange of, with brown coal)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 72-2 (Electrochemistry)
Section cross-reference(s): 66, 78

TI Effects of the solution pH on the electrochemical behavior of
tris(bipyridine)ruthenium and ferricyanide ions at a clay-modified
electrode
ST ruthenium bipyridine redox clay electrode; hexacyanoferrate oxidn
electrochem clay electrode; hexacyanoferrate redn electrochem clay
electrode; adsorption bipyridinine ruthenium clay electrode; sodium
montmorillonite modified electrode
IT Electrodes
(clay-modified)
IT Clays, uses and miscellaneous
RL: USES (Uses)
(electrodes modified with, cyclic voltammetry of hexacyanoferrate and
ruthenium-bipyridine complex redox couples at)
IT Oxidation, electrochemical
(of ruthenium-bipyridine complex and hexacyanoferrate ions at
clay-modified and glassy carbon electrodes, pH in relation to)
IT Adsorption
(of ruthenium-bipyridine complex by clay-modified electrodes, pH in
relation to)
IT Redox reaction
(electrochem., of ruthenium-bipyridine complex and hexacyanoferrate
ions at clay-modified and glassy carbon electrodes, pH in relation to)
IT 13408-62-3, Hexacyanoferrate(3-) 13408-63-4, Hexacyanoferrate(4-)
15158-62-0 18955-01-6
RL: PRP (Properties)
(electrochem. properties of redox couple contg., at clay-modified and
glassy carbon electrodes)
IT 7440-44-0, Carbon, uses and miscellaneous
RL: USES (Uses)
(electrodes from glassy, cyclic voltammetry of redox couples of
hexacyanoferrate and of ruthenium-bipyridine complex at)
IT 1318-93-0, uses and miscellaneous
RL: USES (Uses)
(electrodes modified with, cyclic voltammetry of hexacyanoferrate and
ruthenium-bipyridine complex redox couples at)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 9-3 (Biochemical Methods)
TI High-performance liquid chromatography of proteins on alumina
ST high performance liq chromatog protein; protein chromatog alumina
IT Proteins
RL: ANT (Analyte); ANST (Analytical study)
(chromatog. of, on alumina)
IT Chromatography, gel
(of proteins, on alumina)
IT Chromatography, column and liquid
(high-performance, of proteins, on alumina)
IT 1344-28-1, analysis
RL: ANST (Analytical study)
(proteins chromatog. on)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 54-2 (Extractive Metallurgy)
TI Equilibrium relationships in the extraction of metals from ammoniacal
solution with low rank coals
ST metal extn ammoniacal coal; zinc extn ammoniacal coal; cadmium extn
ammoniacal coal; cadmium extn ammoniacal coal; nickel extn ammoniacal
coal; copper extn ammoniacal coal; coal extn metal ammoniacal; lignite
extn metal ammoniacal
IT Metals, preparation
RL: PREP (Preparation)
(extn. of, from ammoniacal solns. by coal)
IT Coal
Coal, brown
RL: PROC (Process)
(in metal extn. from ammoniacal solns.)
IT Ion exchange
(in metal extn. from ammoniacal solns. by coal)
IT 7440-02-0P, preparation 7440-43-9P, preparation 7440-50-8P,
preparation
RL: PREP (Preparation)
(extn. of, from ammoniacal solns. by coal)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)
TI Physical restraining property of gelatins - pH dependence of physical
retardance of gelatins treated with ion exchange resins
ST gelatin emulsion ripening restraining
IT Ion exchangers
(photog. gelatin treated by, effect on emulsion ripening)
IT Photographic emulsions
(ripening of, pH dependence of phys. restraining property of gelatin
in, treated with ion exchange resins)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 66 (Surface Chemistry and Colloids)
TI Theoretical and experimental study of an elution gradient for the
partition chromatography of organic acids
ST chromatog org acid; elution gradient chromatog
IT Acids, analysis
Amino acids, analysis
RL: ANT (Analyte); ANST (Analytical study)
(chromatog. of, elution gradient in)
IT Chromatography
(elution gradient in, equation for)

L3 29 ANSWERS CAPLUS COPYRIGHT 2001 ACS
CC 3A (Nuclear Phenomena)
TI Exchange adsorption of radioactive ions on paper

L3 29 ANSWERS BIOSIS COPYRIGHT 2001 BIOSIS

TI ENZYMATIC PROPERTIES OF FISH MUSCLE ALDOLASE.
IT Miscellaneous Descriptors
PAGRUS-MAJOR SCOMBER-JAPONICUS CYPRINUS-CARPIO THERMAL INACTIVATION
PH ***DEPENDENCE***
AMMONIUM SULFATE FRACTIONATION
ION - ***EXCHANGE***
CHROMATOGRAPHY

L3 29 ANSWERS BIOSIS COPYRIGHT 2001 BIOSIS
TI CUPRIC ION ADSORPTION ON HUMIC-ACID AND FULVIC-ACID FROM LACUSTRINE SEDIMENT.
IT Miscellaneous Descriptors
BROA RESERVOIR BRAZIL ***PH*** ***DEPENDENCE*** ***ION***
EXCHANGE HOMOGENOUS SURFACE

NOT ALL FILES IN THE CURRENT ENVIRONMENT ALLOW THE USE OF SCAN
ALL ELIGIBLE ANSWERS HAVE BEEN SCANNED

=> s l3 and (protein# or enzyme?)
5 FILES SEARCHED...
11 FILES SEARCHED...
L4 5 L3 AND (PROTEIN# OR ENZYME?)

=> d bib ab 1-5

L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2001 ACS
AN 1999:116019 CAPLUS
DN 130:278757
TI ***pH*** ***dependence*** of ***ion*** - ***exchange*** equilibrium of ***proteins***
AU Bosma, J. C.; Wesselingh, J. A.
CS Chemical Engineering Dept., University of Groningen, Groningen, 9747 AG, Neth.
SO AIChE J. (1998), 44(11), 2399-2409
CODEN: AICEAC; ISSN: 0001-1541
PB American Institute of Chemical Engineers
DT Journal
LA English
AB The adsorption equil. of bovine serum albumin on Q-sepharose, a strong anion exchanger, was studied with batch equil. expts. at pH between 4 and 9 and ionic strengths between 5 and 440 mmol/L. Dependence of the adsorption equil. on the ionic strength was modeled as an ion exchange reaction. A simplified mechanism of this ion exchange reaction also yielded an expression for the dependence of the equil. on the charge of the ***protein*** . This model describes the measurements well, using fitted consts. with phys. realistic values.
RE.CNT 31
RE
(1) Bellot, J; Proc Biochem 1993, V28, P365 CAPLUS
(2) Brooks, C; AIChE J 1992, V38, P1969 CAPLUS
(3) Fausnaugh-Pollitt, J; J Chromatog 1988, V443, P221 CAPLUS
(7) Hill, T; J Phys Chem 1956, V60, P253 CAPLUS
(8) Hu, S; J Chromatog 1992, V605, P175 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2001 ACS
AN 1984:170947 CAPLUS
DN 100:170947
TI High-performance liquid chromatography of ***proteins*** on alumina
AU Laurent, C. J. C. M.; Billiet, H. A. H.; De Galan, L.; Buytenhuys, F. A.; Van der Maeden, F. P. B.
CS Lab. Anal. Scheikd., Tech. Hogesch. Delft, Delft, 2600 GA, Neth.
SO J. Chromatogr. (1984), 287(1), 45-54
CODEN: JOCRAM; ISSN: 0021-9673
DT Journal
LA English
AB ***Proteins*** were sepd. on alumina with an aq. mobile phase by ion-exchange and size-exclusion chromatog. and by a combination of both techniques. The ***pH*** ***dependence*** of the ***ion*** - ***exchange*** retention mechanism is explained on the basis of 2 similar concepts: the isoelec. point of the ***protein*** and the zero point of charge of the alumina surface. The possibility of influencing the surface properties of alumina by the choice of the buffer anion lends great flexibility to the system. However, the size exclusion selectivity is limited owing to the small choice of presently available aluminas. Examples are given that demonstrate the advantages of alumina for the sepn. of strongly basic ***proteins*** at high pH.

L4 ANSWER 3 OF 5 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1989:243764 BIOSIS
DN BA87:124829
TI ENZYMATIC PROPERTIES OF FISH MUSCLE ALDOLASE.
AU NAKAGAWA T; NAGAYAMA F
CS DEP. FOOD SCI. AND TECHNOL., FAC. FISHERIES, TOKYO UNIV. FISHERIES, MINATO-KU, TOKYO 108, JPN.
SO COMP BIOCHEM PHYSIOL B COMP BIOCHEM, (1989) 92 (2), 405-410.
CODEN: CBPBB8. ISSN: 0305-0491.
FS BA; OLD
LA English
AB 1. Aldolases were isolated from the ordinary muscle of red sea bream Pagrus major Pacific mackerel Scomber japonicus, and carp Cyprinus carpio by ammonium sulfate fractionation, followed by ion-exchange chromatography on DEAE-cellulose and CM-Sepharose CL-6B columns, and examined for enzymatic properties. 2. The aldolases showed the highest activity in a pH range from 6.8-7.8 Km values for fructose-1,6-bis-phosphate ranged from 0.025-0.10 mM. 3. Irrespective of fish species, aldolase activity was inhibited by ATP, ADP, and AMP. ATP showed the strongest inhibition and

was competitive with fructose-1,6-bisphosphate. 4. The aldolases did not require divalent metal ions for activation and were completely inhibited at 0.1 mM Cu2+. 5. Thermal inactivation of the ***enzymes*** was of the first-order reaction. Red sea bream, Pacific mackerel and carp ***enzymes*** lost the activity by 50% when incubated at 50.degree. C for 8, 14 and 23 min, respectively.

L4 ANSWER 4 OF 5 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1976:214222 BIOSIS
DN BA62:44222
TI DNA POLYMERASES OF MURINE LBN-B LEUKEMIC CELLS.
AU SIEDLECKI J A; MIKKE R; ZMUDZKA B
SO ACTA BIOCHIM POL, (1976) 23 (1), 69-84.
CODEN: ABPLAF. ISSN: 0001-527X.
FS BA; OLD
LA Unavailable
AB In the postmitochondrial fraction of murine LBN/b leukemic cells, 4 fractions with DNA polymerase activity (I, II, III, IV) were found. On the basis of ion exchanger affinity and poly(A), poly(C) and poly(Cm) replication ability, fraction I was classified as RNA-directed DNA polymerase of viral origin. On the basis of the differences in ***ion*** ***exchanger*** affinity, MW, template requirement ***pH*** - ***dependence*** of enzymatic activity and NaCl concentration, divalent ion requirements and susceptibility to N-ethylmaleimide inhibition, fractions II, III and IV were classified as DNA-directed DNA polymerases .beta., .alpha. and .gamma., respectively. Three fractions, i.e., reverse transcriptase, and DNA-directed DNA polymerases .beta. and .gamma., incorporated dTMP on a poly(A) .cntdot. oligo(dT) template-primer. Despite the similarity of the reaction of DNA polymerases .beta. and .gamma. with poly(A) .cntdot. oligo(dT), some other properties of these ***enzymes*** suggest that they represent distinct enzymatic entities.

L4 ANSWER 5 OF 5 CEABA-VTB COPYRIGHT 2001 DECHEMA
AN 1999(00):0122 CEABA-VTB FS V
DN VTB: 1999(10):101
TI ***pH*** ***dependence*** of ***ion*** - ***exchange*** equilibrium of ***proteins*** pH-Abhaengigkeit des Gleichgewichts des Ionenaustauschprozesses von Proteinen
AU Bosma, J.C.; Wesselingh, J.A. (Univ. Groningen, 9747 AG Groningen, Netherlands)
CS Univ. of Groningen (NL)
SO AIChE J. (1998) 44(11), 2399/2409, 12 Abb, 4 Tab, 31 Qu
CODEN: AICEAC ISSN: 0001-1541
DT Journal
LA English
AB The adsorption equilibrium of bovine serum albumin on Q-sepharose a strong anion exchanger was studied with batch equilibrium experiments at pH from 4 to 9 and ionic strengths from 5 to 440 mmol/L. Dependence of the adsorption equilibrium on the ionic strength was modelled as an ion exchange reaction. A simplified mechanism of this ion exchange reaction also yielded an expression for the dependence of the equilibrium on the charge of the ***protein*** . This model describes the measurements well using fitted constants with physically realistic values.

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